

## **PRELIMINARY AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listing, of claims in the application.

### **Listing of Claims**

1 Claim 1 (Currently amended). A protection barrier comprising:

2 an elongated barrier defining a chamber therein, said barrier having first and  
3 second side walls, a base and a top surface, each of said first and second side walls  
4 including a plurality of non-vertical wall segments disposed thereon;

5 a guide channel being inwardly curved and carried by each of said first and  
6 second side walls, said guide channel being positioned in horizontal alignment with  
7 similar sized ~~guides~~ guide channels on like-configured barriers; and

8 a coupling disposed on each opposed first and second end of said barrier, said  
9 coupling for connecting juxtaposed end-to-end arrangement of like-configured  
10 barriers, said coupling including:

11 a tongue extended from each opposed first and second end of said  
12 barrier, said tongue extending vertically between said base and said top  
13 surface of said barrier, said tongue extended from an off-center portion of  
14 each end;

15 a groove indentation in each opposed first and second end and  
16 extending vertically between said base and said top surface of said

17 barrier, said groove having a mirror-image configuration of said tongue,  
18 said groove and tongue having one contiguous surface; and

19 each opposed first and second end of said barrier having beveled corners  
20 providing for pivotable movement of said tongue of a first barrier end when releasably  
21 inserted within a second groove indentation of either end of a like-configured second  
22 barrier thereby forming an end-to-end aligned and nesting relationship of a plurality of  
23 like-configured barriers.

Claim 2 (Canceled).

1 Claim 3 (Currently amended) The protection barrier of Claim 2- 1 wherein said  
2 guide channel including:

3 a said guide channel bounded horizontal by two adjacent wall segments of ~~said~~  
4 a plurality of non-vertical wall segments, ~~said guide channel horizontally aligned with~~  
5 ~~each opening through each buttress~~ on each of said first and second side walls;

6 means for guiding positioned vertically on each of said first and second side  
7 walls proximal of each opposed first and second end of said barrier, said means for  
8 guiding having an inwardly curved portion disposed within said guide channel; and

9 a tube removably extended through said guide channel ~~and through each~~  
10 ~~opening through each buttress,~~ said tube retained within said guide channel by said  
11 inwardly curved portion of said means for guiding;

12 whereby upon an impact of a vehicle with one of said first or second side walls,  
13 said tube and guide channel are impacted with resulting destruction of said tube

14 within said guide channel and with resulting distribution of impact energy along said  
15 guide channel and said two adjacent wall segments of said first and second side walls.

1 Claim 4 (Currently amended). The protection barrier of Claim 1 further comprising:

2 ~~said barrier having a base, a top surface and first and second ends, said~~  
3 chamber is extended in said barrier between said base, said top surface and said first  
4 and second ends;

5 said first and second side walls each including said plurality of non-vertical wall  
6 segments being disposed between said base and said top surface;

7 ~~said first and second ends having beveled corners;~~

8 said guide channel including an upper guide channel aligned parallel with a  
9 lower guide channel, said upper and lower guide channels are each inwardly curved  
10 and spaced apart horizontally between an upper wall sloped segment and a lower wall  
11 sloped segment of said plurality of non-vertical wall segments; ~~and~~

12 a plurality of buttresses positioned vertically at spaced apart locations along  
13 said first and second side walls; each of said plurality of buttresses having an upper  
14 opening and a lower opening therethrough, said upper opening of each buttress being  
15 aligned with said upper guide channel, said lower opening of each buttress being  
16 aligned with said lower guide channel;

17        a first channel edge extended horizontally along said upper wall sloped  
18 segment, said first channel edge providing an upper boundary of said inwardly curved  
19 upper guide channel;

20        a second channel edge extended horizontally along said lower wall sloped  
21 segment, said second channel edge providing an upper boundary of said inwardly  
22 curved lower guide channel;

23        said means for guiding including a plurality of spring clips disposed in spaced  
24 apart vertical orientation to extend between said inwardly curved upper guide channel  
25 and said inwardly curved lower guide channel on each of said first and second side  
26 walls proximal of each opposed first and second end of said barrier, each of said  
27 spring clips having upper and lower inwardly curved portions disposed within  
28 respective upper and lower guide channels; and

29        at least one cable extended horizontally within one of said upper guide channel  
30 and said lower guide channel, said at least one cable retained against respective  
31 spring clips upper or lower inwardly curved portions within one of said upper guide  
32 channel and said lower guide channel, said at least one cable extended between  
33 respective aligned channels of end-to-end aligned and nested like-configured barriers.

1        Claim 5 (Currently amended).    The protection barrier of Claim 4 wherein said upper  
2 and lower guide channels including:

3        an upper tube removably extended through said upper guide channel, ~~and~~  
4 ~~through each respective upper opening of each buttress~~ said upper tube being

5 retained within said upper guide channel by said upper curved portion of each spring  
6 clip, said upper tube having an upper cable inserted horizontally therein for retention  
7 within said inwardly curved upper guide channel; and

8 a lower tube removably extended through said lower guide channel, ~~and~~  
9 ~~through each respective lower opening of each buttress~~ said lower tube having a lower  
10 cable extended horizontally therein for retention below said second channel edge and  
11 within said inwardly curved lower guide channel;

12 whereby upon an impact of a vehicle with one of said first or second side walls,  
13 said upper tube and said lower tube are impacted with resulting destruction of said  
14 upper tube and said lower tube with resulting distribution of impact energy along said  
15 upper guide channel and said lower guide channel of said ~~of said~~ plurality of non-  
16 vertical wall segments.

Claim 6 (Canceled).

1 Claim 7 (Currently amended). The protection barrier of Claim 1 wherein said  
2 barrier is composed of polyethylene material of sufficient density for said barrier to be  
3 substantially rigid, said barrier having an inlet for receipt of ballast into said chamber,  
4 said inlet disposed through said top surface, and an outlet for release of ballast from  
5 said interior chamber, said outlet disposed proximal of said base, whereby said  
6 chamber is filled with ballast during stationary use to facilitate energy-absorbing and  
7 retention in an upright position upon being impacted by a vehicle.

1 8. (Currently amended). A protection barrier comprising:

2 an elongated barrier defining a chamber therein, said barrier having a base, a  
3 top surface, first and second side walls, and first and second ends; each of said first  
4 and second side walls including:

5 a plurality of non-vertical wall segments connected end-to-end  
6 collectively defining a side wall surface;

7 a plurality of buttresses extending vertically in spaced apart  
8 locations along said side wall surface; and

9 a guide channel being horizontally disposed and inwardly  
10 curved in said side wall surface of said first and second side walls,  
11 said guide channel being extended between each one of said plurality  
12 of buttresses, said guide channel positioned in horizontal alignment  
13 with a similar sized guide channel on like-configured barriers;

14 ~~interconnection means extending vertically along each first and second ends,~~  
15 ~~whereby said first and second ends are detachably interconnectable with like-~~  
16 ~~configured interconnection means of either first and second ends of like-configured~~  
17 ~~barriers~~

18 a coupling disposed on each opposed end of said barrier, each coupling being  
19 like-configured for each opposed end thereby said coupling is releasably connectable  
20 in juxtaposed end-to-end arrangement to either opposed end of like-configured  
21 barriers;

22 said coupling including a tongue extended from each opposed end of said  
23 barrier, said tongue extending vertically between said base and said top surface of said  
24 barrier, said tongue extended from an off-center portion of each end;  
25 a groove indentation in each opposed end, said groove extending vertically  
26 between said base and said top surface of said barrier, said groove and said tongue  
27 having one contiguous surface; and  
28 each opposed end of said barrier having beveled corners providing for pivotable  
29 movement of said tongue of a first barrier end relative to a second groove of a like-  
30 configured second barrier end when said tongue of either end of said first barrier is  
31 removably inserted into said second groove of either end of the like-configured second  
32 barrier thereby forming an end-to-end aligned and nesting relationship of a plurality of  
33 like-configured barriers.

1 Claim 9 (Currently amended). The protection barrier of Claim 8 further comprising:

2 an upper guide channel horizontally disposed along each side wall surface, said  
3 upper guide channel forming an inwardly curved recess in said side wall surface;

4 a lower guide channel horizontally disposed along said side wall surface, said  
5 lower channel forming a second inwardly curved recess spaced apart from said upper  
6 guide channel in said side wall surface; and

7 each of said buttresses ~~having an upper opening and a lower opening~~  
8 ~~therethrough, said upper openings being in horizontal alignment with said upper~~  
9 ~~guide channel and said lower openings being in horizontal alignment with~~ being

10 vertically extended from about said barrier base to about said barrier top surface,  
11 whereby each of said buttresses intersect said upper guide channel and said lower  
12 guide channel along said side wall surface of each first and second side wall;  
  
13 whereby upon an impact of a vehicle with said first side wall or said second  
14 side wall, each of said buttresses are impacted with distribution of impact energy  
15 along said buttresses, said upper guide channel, said lower guide channel, and said  
16 plurality of non-vertical wall segments of the impacted first or second side wall.

1 Claim 10 (Currently amended). The protection barrier of Claim 9 wherein said  
2 elongated barrier is composed of polyethylene material having sufficient density for  
3 said first and second side walls to be substantially rigid, said barrier having said base  
4 wider than said top surface to facilitate retention in an upright position and further  
5 having said interior chamber accessible for filling with ballast during stationary use to  
6 facilitate energy-absorbing and retention in said upright position upon being impacted  
7 by a vehicle.

Claims 11 - 16 (Canceled).

1 Claim 17 (Currently amended). The protection barrier of Claim ~~16~~ 10 wherein  
2 said barrier having an inlet for receipt of ballast into said chamber, said inlet disposed  
3 through said top surface, and an outlet for release of ballast from said ~~hollow~~ interior  
4 chamber, said outlet disposed on said first side wall or said second side wall adjacent  
5 said base, whereby said chamber is filled with ballast during stationary use.

Claims 18 - 22 (Canceled).



1 Claim 23 (Currently amended). The protection barrier ~~system~~ of Claim 22 17 wherein  
2 ~~said further comprising an~~ interconnection means including:

3 ~~a tongue extended from said first end, said tongue extending vertically along~~  
4 ~~said first end between said base to said top surface of said barrier, said second end~~  
5 ~~having a like configured tongue extended therefrom; and~~

6 ~~a groove indentation in each first end extending vertically along said first end~~  
7 ~~between said base to said top surface of said barrier, said second end having a like-~~  
8 ~~configured groove therein; and~~

9 a connector member having a keyhole slot therein, said connector member is  
10 pivotably disposed on an end post extended from said barrier top surface proximal to  
11 ~~either~~ each coupling disposed on opposed first and second ends of said barrier;

12 whereby said tongue of said first end of said barrier is removably inserted into  
13 said groove indentation of either of a like-configured first and second end of a like-  
14 configured second barrier, said connector member is removably disposed to retain said  
15 tongue inserted in said groove indentation of either of the like-configured first and  
16 second ends of the end-to-end nested arrangement of the plurality of like-configured  
17 barriers.

Claims 24 - 27 (Canceled).

1 Claim 28 (Currently amended). The protection barrier ~~system~~ of Claim 26 5, further  
2 including:

3 a first end member disposed proximal one end of the non-nested barrier ends of  
4 the plurality of like-configured nested barriers, said end member having first and

5 second side walls aligned with each respective side wall of the adjacent nested barrier,  
6 said end member having an outer curved end and an inwardly arcuate end including:

7 a tongue extended from said arcuate end, said tongue extending vertically  
8 along said arcuate end; and

9 a groove indentation in said arcuate end, said groove indentation extending  
10 vertically along said arcuate end;

11 whereby said tongue and said groove indentation of said first end member  
12 are disposed to mate with respective groove indentation and tongue of one of  
13 the non-nested barrier ends of the plurality of like-configured nested  
14 barriers;

15 said first and second side walls including a plurality of non-vertical wall  
16 segments disposed at heights comparable to said first and second side walls of the  
17 plurality of like-configured nested barriers;

18 a like-configured second end member disposed proximal an opposed non-  
19 nested barrier end of the plurality of like-configured nested barriers;

20 a spring clip disposed on said first and second side walls of each first and  
21 second end member, said spring clips being positioned at heights comparable to said  
22 first and second guide channels on adjacently nested barriers, each of said spring  
23 clips having upper and lower inwardly curved portions through which respective upper  
24 and lower cables are retained in encircling relationship around said first and second  
25 end members; and

26           said upper and lower cables are disposed to extend from said first end member  
27   to said like-configured second end member, said upper and lower cables extended  
28   along each first and second side wall of the plurality of like-configured nested barriers  
29   positioned end-to-end between said first and second end members.

Claims 29 - 30 (Canceled).

1   Claim 31 (New)       A protection barrier comprising:

2           an elongated barrier defining a chamber therein, said barrier having first and  
3   second side walls, a base and a top surface, said first side wall including side wall  
4   surfaces having a plurality of non-vertical wall segments disposed thereon, said  
5   second side wall including at least one non-vertical side wall surface;

6           a first guide channel inwardly curved in said side wall surfaces of said first side  
7   wall, said guide being positioned in horizontal alignment with similar sized guide  
8   channels on like-configured barriers;

9           a second guide channel inwardly curved in said first side wall, said  
10   additional guide being positioned in horizontal alignment with said guide in  
11   said first side wall;

12           said first side wall surfaces being substantially inwardly angled from said base  
13   to said top surface, said second side wall having at least one side wall surface being  
14   inwardly angled significantly greater than said inwardly angled first side wall surfaces;  
15   and

16 a coupling disposed on each opposed end of said barrier, each coupling being  
17 like-configured for releasably connecting either end of said barrier in juxtaposed end-  
18 to-end arrangement with either end of like-configured barriers.

1 Claim 32 (New) The protection barrier of Claim 31, further comprising:

2 said first and second guide channels forming respective inwardly curved and  
3 horizontally aligned guide channels extended in spaced apart horizontal relationship  
4 on said first side wall;

5 a plurality of spring clips vertically disposed in spaced apart relationship on  
6 said first side wall, said spring clips being positioned at heights comparable to said  
7 first and second guide channels spaced apart horizontally on said first side wall, each  
8 spring clip having upper and lower inwardly curved portions disposed within  
9 respective first and second guide channels on said first side wall; and

10 said second side wall having at least one side wall surface being inwardly  
11 angled at between about eighty degrees to about ninety degrees.

1 Claim 33 (New) The protection barrier of Claim 32 wherein said coupling disposed  
2 on each opposed end of said barrier including:

3 a tongue extended from each opposed end of said barrier, said tongue extending  
4 vertically between said base and said top surface of said barrier, said tongue extended  
5 from an off-center portion of each end;

6 a groove indentation in each opposed end, said groove extending vertically  
7 between said base to said top surface of said barrier, said groove and said tongue  
8 having one contiguous surface; and

9 each opposed end of said barrier having beveled corners providing for pivotable  
10 movement of said tongue of a first barrier end relative to a like-configured second  
11 groove of a like-configured second barrier end, said tongue of either end of said first  
12 barrier is removably inserted into said second groove of either end of the like-  
13 configured second barrier in an end-to-end aligned and nested relationship of a  
14 plurality of like-configured barriers oriented in a curved orientation.

1 Claim 34 (New) The protection barrier of Claim 33, further including:

2 a first end member disposed proximal of one end of the non-nested barrier ends  
3 of the plurality of like-configured nested barriers, said end member having first and  
4 second side walls aligned with each respective side wall of the adjacent nested barrier,  
5 said end member having an outer curved end and an inwardly arcuate end including:

6 a tongue extended from said arcuate end, said tongue extending vertically  
7 along said arcuate end; and

8 a groove indentation in said arcuate end, said groove indentation extending  
9 vertically along said arcuate end;

10 whereby said tongue and said groove indentation of said first end member  
11 are disposed to mate with respective groove indentation and tongue of one of

12 the non-nested barrier ends of the plurality of like-configured nested  
13 barriers;

14 said first and second side walls of said first end member including a plurality of  
15 non-vertical wall segments disposed at heights comparable to respective side walls of  
16 the plurality of like-configured nested barriers;

17 an upper and lower guide channel disposed horizontally in each of said first  
18 and second side walls of said first end member, said upper and lower guide channels  
19 being spaced apart in horizontal alignment with similar sized guide channels on  
20 respective side walls of the plurality of like-configured nested barriers;

21 a like-configured second end member disposed proximally against an opposed  
22 non-nested barrier end of the plurality of like-configured nested barriers; and

23 an upper and a lower connector disposed to extend along each of said upper  
24 and lower guide channels of said first end member, said upper and lower connectors  
25 extended along each guide channel of respective side walls of the plurality of like-  
26 configured nested barriers, whereby said upper and lower connectors encircle like  
27 configured upper and lower guide channels of said like-configured second end  
28 member, thereby maintaining end-to-end alignment and nesting relationship  
29 therebetween of the plurality of like-configured barriers when at least one of said  
30 barriers are impacted by a vehicle.

**Amendments to the Drawings**

The attached sheets of drawings include changes to Figures 5, 12 - 14, 16 - 20, 22, and new Figure 23 for the Examiner's review and approval. Submitted herewith are amended formal drawings, Figures 1 - 23.

Attachment: Replacement Figures 1 - 23